

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: David W. Farchmin
Serial No.: 10/675,535
Filed: September 30, 2003
Title: Wireless Location Based Automated Components
Art Unit: 2121
Examiner: Jennifer L. Norton
Our Ref.: 110003.00051.03AB206

Commissioner for Patents
PO Box 1450,
Alexandria, Virginia 22313-1450

Box: Amendment

Dear Sir:

In response to the Office Action dated June 9, 2009, please enter the following remarks in the above referenced application.

REMARKS AFTER FOURTH NON-FINAL OFFICE ACTION

In the interest of clarity, the titles and paragraph numbers hereafter match the titles and paragraph numbers in the most recent Office Action.

Claim Rejections – 35 USC Section 103

4-53. The Office Action rejected each of claims 1, 3, 5, 7, 9, 11-23, 25, 26, 28-33, 35-42, 44, 48, 50, 51, 54, 56-60 and 62-65 as obvious over De Meyer (US application publication No. 2005/0021158). Applicant traverses this rejection.

With respect to claim 1, claim 1 requires a stationary human-machine interface that includes both (1) a wireless receiver and (2) at least one of an input device (e.g., a keyboard) to receive input directly from a human user and a display for providing information directly to a human user.

Applicant admits that De Meyer's Background teaches systems that include stationary HMI's. Applicant also admits that De Meyer's teaches an inventive system that includes stationary access point type data modules AP1, AP2, etc., and portable

monitoring modules MU, where signals transmitted by a monitoring module MU and received by the access points AP1, AP2, etc., are used to ascertain the location of the monitoring module. However, even if De Meyer's background teachings and inventive teachings were to be combined to provide a system including stationary and mobile HMI type devices where stationary access points receive signals from the mobile HMIs and those signals are used to ascertain the location of the mobile HMI, absolutely nothing in De Meyer teaches or even remotely suggests that the wireless receivers may, should or could be included in stationary interface devices where the interface devices also include at least one of an input device and a display. Instead, combining De Meyer's teachings, one of skill in the art would, at best, be motivated to provide a system including a stationary interface and a separate stationary access point proximate the interface where the access point, not the stationary interface, includes the receiver. A system including a wireless receiver separate from a stationary interface is not the same as a system that includes an interface (having at least one of an input device and a display) that itself includes a **wireless** receiver as required by claim 1 and claims that depend there from.

In the event that the Examiner maintains this rejection Applicant requests that the Examiner point out any teaching in De Meyer that even remotely suggests that a stationary HMI that includes at least one of an input device and a display should include a **wireless** receiver. Instead, in one case De Meyer teaches a stationary HMI and in another case De Meyer teaches that a stationary HMI may be replaced by a wireless receiving access point and a portable HMI.

In addition, despite the Examiner's assertion that De Meyer does not teach away from stationary HMI's, Applicant is clear that De Meyer does teach away. De Meyer clearly describes problems with stationary HMIs throughout the Background section of the specification and De Meyer's invention is a replacement for stationary HMIs. In this regard Applicant examined De Meyer closely again to attempt to identify any reason contemplated by De Meyer for including both stationary and mobile HMIs in a single system and was unable to locate even one suggestion or hint that both type of interfaces should be included in a single system. This lack of teaching in De Meyer is

not surprising because De Meyer teaches a mobile replacement system of stationary HMIs. Teaching a replacement for a system is teaching away from that system.

Moreover, even if De Meyer is construed as simply teaching that stationary HMIs are a less preferred option, that does not address the fact that De Meyer fails to even remotely suggest that a stationary HMI could or should include a receiver for receiving WID signals.

For at least these reasons Applicant believes claim 1 and claims that depend there from are non-obvious over De Meyer and requests that the current rejection be withdrawn.

With respect to claims 23, 31, 37, 40 and 54, each of those claims has limitations that are similar to the claim 1 limitations described above and Applicant believes that claims 23, 31, 37, 40 and 54 and claims that depend there from are non-obvious over De Meyer for the same reasons that claim 1 is non-obvious as discussed above. For this reason Applicant requests that the rejection of claims 23, 31, 37, 40 and 54 and claims that depend there from be withdrawn.

54-57. The Office Action rejected each of claims 66-69 as obvious over De Meyer (US application publication No. 2005/0021158). Applicant traverses this rejection.

Claim 66 of the present application requires, among other things, that a wireless information device (WID) (1) receive signals from a transmitter, (2) determine signal strengths of the received signals and (3) transmit the signal strength data to a receiver and that a second processor that is separate from the WID use the signal strength data to determine WID position.

In response to the new grounds of rejection on page 27 of the current Office Action where the Examiner indicates that De Meyer teaches that a WID determines signal strengths and transmits signal strength data to at least one receiver at paragraph 0076, Applicant has reviewed the paragraph 0076 teachings and is clear that paragraph 0076 does not include these teachings. To this end, De Meyer's paragraph 0076 teaches that a mobile monitoring module MU receives short range field signals from

proximate communication modules and that the signals are used by the MU module to determine the position of the module MU. Thereafter during a "second step", module MU transmits the position data (i.e., the actual position of the module MU) to a proximate communication module AP6. Thus, it is clear in paragraph 0076 that De Meyer contemplates a system wherein the module MU determines its position and that MU (i.e., the WID) does not transmit signal strength data to a receiver.

In addition, claim 66, similar to claim 1, requires, in addition to a wireless information device (WID) (e.g., a hand held portable wireless device), a first component that includes a wireless transmitter, a display device for presenting information to a user and an input device for receiving input directly from a human user. As discussed above, nothing in De Meyer teaches or even remotely suggests a system that includes, in addition to a WID, a component that includes a display, an input device and a wireless transceiver and, in fact, because De Meyer teaches a replacement for standard stationary interface devices, De Meyer teaches away from such a system.

For at least the above reasons claim 66 is non-obvious over De Meyer and Applicant requests that the current rejection be withdrawn.

Applicant repeats the previously tendered arguments hereafter regarding other parts of De Meyer cited against claim 66 to be complete in this response.

"Signal strength data" in the claims of the present application is different than "signals of known signal strength". A signal of known signal strength may include a signal having a known strength of ten units when initially transmitted. As known in the art, as the signal propagates through space, the signal loses strength so that, at 5 meters from the transmission point, the signal may have a strength of 6 units and at 10 meters the signal may have a strength of 2 units. In this case, when the signal is received at 5 and 10 meters and is measured, the signal strength data resulting therefrom would be 6 units and 2 units. Thus, while the signal of known strength is 10 units,

the signal strength data is either 6 units or 2 units depending on the distance from the transmission point at which the signal is detected.

Turning to De Meyer, in no case does De Meyer teach or suggest transmitting signal strength data from any device to any other device. More specifically, De Meyer fails to teach or suggest a WID transmitting signal strength data to a second processor so that the second processor can use the signal strength data to determine WID location. In addition, De Meyer fails to teach or suggest a second processor that uses signal strength data transmitted to it by a WID to ascertain WID location.

De Meyer teaches two processes for determining MU or WID location. **First**, in paragraph 76, De Meyer teaches that a wireless device MU receives short range fields or “emissions” from HMI communication modules AP5, AP6, etc., and that device MU itself determines its own position (see first sentence of paragraph 76). Here, Applicant admits that the signals generated by modules AP5 and AP6 are signal strength signals but those signal strength signals are not generated by the MU (i.e., by a WID) and are not signal strength data signals. Thus, in this embodiment there is no second processor separate from the device MU that determines the position of the device MU and instead the device MU determines its position and provides the position information to the second processor. In addition, the MU (i.e., the WID) in De Meyer’s first system does not transmit signal strength data to a second processor and instead transmits MU position data (see paragraph 0076, lines 10-17).

In paragraph 77, De Meyer teaches that in a **second** process the wireless device MU generate “emissions” (i.e., “short range fields” as described in the second sentence in paragraph 76) that are received by modules AP5, AP6, etc., where the short range fields or emissions are analyzed to determine the position of the device MU. Here, emissions or short range fields do not include and are not akin to signal strength data. Instead, the short range emissions transmitted by the MU to modules AP5 and AP6 have to be analyzed to identify signal strength data when they are received. Thus, in De Meyer’s second process, known strength signals are not transmitted to a WID (instead known signal strength signals are transmitted by a WID). Here the known

signal strengths are not known strengths of signals received by De Meyer's MU and instead are signals of known strength generated by the MU itself.

Applicant also points out that the Examiner has confusingly combined the teachings of both De Meyer's methods to arrive at the conclusion that claim 66 is obvious. To this end, claim 66 requires two different signal transmissions after which WID location is determined. First, claim 66 requires transmission from a first transmitter to a WID. Second, claim 66 requires a second transmission from the WID to the second processor after which the second processor determines WID location.

In contrast, De Meyer's first position determining method (see paragraph 0076) teaches that signals are transmitted from modules AP5, AP6 to device MU and device MU then determines its own location as a function of the received signals. In this first method there is no transmission from MU to a second processor prior to determination of MU position.

Also, in contrast, De Meyer's second position determining method (paragraph 0077) teaches that the position determination process is kicked off when the MU transmits signals to a second processor which are then used by the second processor to determine MU position. Here, there is no transmission from a module AP5 or AP6 to the WID prior to the position determination. De Meyer teaches that the first and second methods are alternatives.

The Examiner combines the first method transmission and the second method transmission to provide the two transmissions required by claim 66. Applicant is clear that De Meyer's two transmissions should not be combined in this manner.

For at least these reasons Applicant believes that claim 66 and the claims that depend there from are patentable over De Meyer and requests that the rejection be withdrawn.


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Applicant has introduced no new matter in making the above remarks and amendments. In view of the above remarks, Applicant believes claims 1, 3-23, 25-46, 48-54, 56-60 and 62-69 of the present application recite patentable subject matter and allowance of the same is requested. No fee in addition to the fees already authorized in this and accompanying documentation is believed to be required to enter this amendment, however, if an additional fee is required, please charge Deposit Account No. 17-0055 in the amount of the fee.

Respectfully submitted,

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Date: 11-11-09

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